

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number  
**WO 2005/042731 A1**

(51) International Patent Classification<sup>7</sup>: C12N 5/08, 5/06, G01N 33/53

(21) International Application Number:  
PCT/US2004/036143

(22) International Filing Date: 29 October 2004 (29.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/516107 31 October 2003 (31.10.2003) US

(71) Applicant (for all designated States except US): **CHILDREN'S MEDICAL CENTER CORPORATION** [US/US]; 300 Longwood Avenue, Boston, MA 02115 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BALAZS, Alejandro** [—/US]; **x. MULLIGAN, Richard** [US/US].

(74) Agents: **GRANAHAN, Patricia et al.**; Ropes & Gray LLP, One International Place, Boston, MA 02110-2624 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

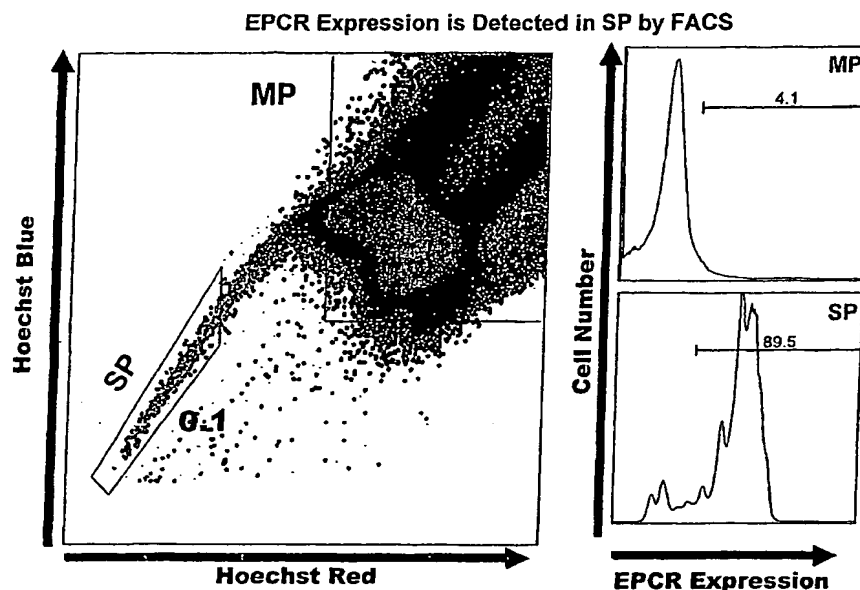
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: METHODS FOR PURIFYING HEMATOPOIETIC STEM CELLS



(57) Abstract: Described herein are methods for purifying hematopoietic stem cells. Also described herein are methods for purifying EPCR+ cells. The invention also provides substantially pure isolated hematopoietic stem cells, including EPCR+ hematopoietic stem cells.

WO 2005/042731 A1

BEST AVAILABLE COPY

WO 2005/042731 A1



---

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*